UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

35969

7590

07/15/2010

Barbara A. Shimei Director, Patents & Licensing Bayer HealthCare LLC - Pharmaceuticals 555 White Plains Road, Third Floor Tarrytown, NY 10591 EXAMINER

CARLSON, KAREN C

ART UNIT PAPER NUMBER

1656

DATE MAILED: 07/15/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,175	05/16/2007	Stefan Golz	LE A 36 839	7833

TITLE OF INVENTION: ISOLATED PHOTOPROTEIN MTCLYTIN, AND USE THEREOF

I	APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
	nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/15/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifica	ttions.	ng the Patent, advance of herwise in Block 1, by (N	ote: A certificate of	mailing	can only be used for	correspondence address as ate "FEE ADDRESS" for domestic mailings of the
,				Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
35969	35969 7590 07/15/2010					· ·	viccion.
Barbara A. Shimei Director, Patents & Licensing Bayer HealthCare LLC - Pharmaceuticals				Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
555 White Plain Tarrytown, NY	s Road, Third Floor 10591	•					(Depositor's name)
1011 / 10 11 11 1			L				(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO)R	ATTOR	RNEY DOCKET NO.	CONFIRMATION NO.
10/572,175	05/16/2007		Stefan Golz		I	LE A 36 839	7833
TITLE OF INVENTION	N: ISOLATED PHOTOP	ROTEIN MTCLYTIN, A	ND USE THEREOF				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	IE EEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO NO	\$1510	\$300	\$0	LILL	\$1810	10/15/2010
EXAM		ART UNIT	CLASS-SUBCLASS	30 \$1810		\$1010	10/13/2010
CARLSON	, KAREN C	1656	435-069100	_			
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON PLEASE NOTE: Unless an assignee is identified below, no assignee 			(1) the names of up or agents OR, alterna (2) the name of a sin registered attorney o 2 registered patent at listed, no name will ITHE PATENT (print or data will appear on the	e of a single firm (having as a member a torney or agent) and the names of up to patent attorneys or agents. If no name is me will be printed.			
(A) NAME OF ASSI	GNEE	pletion of this form is NO	(B) RESIDENCE: (CI.	Y and STATE OR (,	np entity 🖵 Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta		d above)	overpayment, to De				extra copy of this form). R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte ttes Patent and Trademark	ed from anyone other thank c Office.	the applicant; a reg	istered at	ttorney or agent; or the	assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	itiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC	FR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR	on is required to obtain on 1.14. This collection is a depending upon the included the complete of the complet	r retain a benefit by estimated to take 12 lividual case. Any c cer, U.S. Patent and TO THIS ADDRES	the public minutes omments Tradema S. SEND	c which is to file (and to complete, including s on the amount of tim ark Office, U.S. Depan O TO: Commissioner fo	by the USPTO to process); gathering, preparing, and e you require to complete the threat of Commerce, P.O. or Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/572,175 05/16/2007		Stefan Golz	LE A 36 839	7833		
35969 7	35969 7590 07/15/2010			EXAMINER		
Barbara A. Shim	nei	CARLSON, KAREN C				
Director, Patents &		ART UNIT	PAPER NUMBER			
Bayer HealthCare	LLC - Pharmaceutical	1656				
555 White Plains	Road, Third Floor	DATE MAILED: 07/15/2010				
Tarrytown, NY 10591			DATE MAILED: 07/13/2010			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 151 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 151 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)				
	 10/572,175	GOLZ ET AL.				
Notice of Allowability	Examiner	Art Unit				
	Karen Cochrane Carlson	1656				
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIP of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communic IGHTS. This application is subjected MPEP 1308.	s application. If not included ation will be mailed in due course. THIS				
2. X The allowed claim(s) is/are <u>1,4-6,8,9,14,15 and 20-23</u> .						
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	been received. been received in Application N	o				
* Certified copies not received:						
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EXAMII	NER'S AMENDMENT or NOTICE OF				
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 						
1) ☐ hereto or 2) ☐ to Paper No./Mail Date	,	,				
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the	s Amendment / Comment or in t	rawings in the front (not the back) of				
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERI	AL must be submitted. Note the				
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Sumr Paper No./Mai 7. ☑ Examiner's Am	l Date				

This Office Action is in response to the paper filed April 22, 2010.

Claims 1, 4-6, 8, 9, 14, 15, and 20-23 are currently pending.

Benefit of priority is to September 16, 2003.

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas C. Blankinship on June XX, 2010.

Examiner's Amendments to the Claims:

- 1. (Previously presented) An isolated nucleic acid molecule which is selected from the group consisting of:
- a) a nucleic acid molecule which encodes a polypeptide which contains the amino acid sequence disclosed by SEQ ID NO: 2;
- b) a nucleic acid molecule which contains the sequence depicted by SEQ ID NO: 1;
- c) a nucleic acid molecule which exhibits a sequence identity along its full length with SEQ ID NO: 1 of at least 95% and encodes a polypeptide which has the biological function of a photoprotein; and

Application/Control Number: 10/572,175 Page 3

Art Unit: 1656

d) a nucleic acid molecule which exhibits a sequence identity along its full length with SEQ ID NO: 1 of at least 65% and encodes a polypeptide which has the biological function of a photoprotein.

2-3. (Canceled)

- 4. (Previously presented) The nucleic acid as claimed in claim 1, which contains a functional promoter 5' to its coding sequence.
- 5. (Previously presented) A recombinant DNA or RNA vector which contains the nucleic acid as claimed in claim 4.
- 6. (Previously presented) An organism which harbors the vector as claimed in claim 5.
 - 7. (Canceled)
- 8. (Previously presented) An isolated polypeptide which is encoded by a nucleic acid sequence as claimed in claim 1.
- 9. (Previously presented) A method for <u>producing a polypeptide having</u>

 <u>phosphoprotein activity, said method comprising placing the nucleic acid of claim 1 into</u>

 <u>a expressing the polypeptide as claimed in claim 8 in bacteria, a viral system, yeast or a eukaryotic cell or in an in-vitro expression system <u>under conditions that express said</u>

 <u>nucleic acid, and thereby producing by expressing said polypeptide.</u></u>

10-13. (Canceled)

Application/Control Number: 10/572,175

Art Unit: 1656

14. (Previously presented) The nucleic acid as claimed in claim 1, further comprising a nucleic acid encoding a polypeptide other than that encoded by the nucleic acid of claim 1, wherein a fusion gene is formed and wherein said fusion gene functions as a marker gene or reporter gene.

Page 4

15. (Previously presented) A photoprotein polypeptide encoded by the <u>nucleic</u>

<u>acid fusion gene</u> of claim 14, wherein said <u>photoprotein</u> polypeptide functions as a <u>label</u>

<u>marker</u> or reporter.

16-19. (Canceled)

- 20. (Previously presented) The polypeptide as claimed in claim 8, wherein said polypeptide functions as a reporter protein in searching for pharmacologically active compounds.
- 21. (Previously presented) The nucleic acid as claimed in claim 1, wherein said nucleic acid functions as a reporter gene in searching for pharmacologically active compounds.
- 22. (Previously presented) The polypeptide of claim 8, wherein said polypeptide is coupled to an additional protein.
- 23. (Currently Amended) The conjugate polypeptide of claim 22, wherein said additional protein is selected from the group consisting of: an antibiotic, an enzyme, a receptor, an antibody and an ion channel.

Application/Control Number: 10/572,175 Page 5

Art Unit: 1656

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson whose telephone number is 571-272-0946. The examiner can normally be reached on 6:00 AM - 4:00 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karen Cochrane Carlson/ Primary Examiner, Art Unit 1656 Application/Control Number: 10/572,175

Page 6

Art Unit: 1656